

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

Debra Payton, ADA

Norfolk County District Attorney's Office By e-mail

March 14, 2011

Re: Comm. v.

State Lab no.

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

ADA Payton,

Please find enclosed a discovery packet for the case noted above. The material is collated in the following manner:

- 1) the chemist's c.v.'s
- 2) the drug receipt to the Weymouth Police
- 3) inventory control card for the submission
- 4) the bench notes; the drug powder analysis form
- 5) the data from the Gas Chromatography/ Mass Spectrometry (GC/MS) run

I was the custodial chemist for the submission, performing the preliminary analysis. Annie Khan performed the confirmatory analysis by gas chromatography/mass spectrometry (gc/ms).

If you need further clarification of this material, please call me directly at (617) 983-6627.

Sincerely,

Michael Lawler

Senior Chemist

Cc: Charles Salemi, Annie Khan

#### Curriculum Vitae

#### Michael Lawler

#### **Education:**

University of Virginia, Charlottesville, Va. Bachelor of Arts in English, 1975 Harvard University, Cambridge, Ma. Master of Arts in biology, 1995

## Experience:

1990-present currently Chemist III, Mass. Dept. of Public Health, Drug Lab analyst determining the identity of unknown substances and providing expert testimony in the Courts. Conduct special testing for poisons within drug exhibits.

2005-present lecturer in chemistry, Curry College, Milton, Ma.

1988-1990 New England Newborn Screening (NENS) Biochemist conducting pilot studies and validation trials of new newborn screening tests. Investigator and co-author of papers noted below. Introduced screening test for Biotinidase Deficiency. Liaison with interstate collaborators in national studies.

1983-1988 Supervised NENS urine screening lab for metabolic disorders. Conducted research in collaboration with Children's Hospital (Boston) detecting neuroblastoma, a cancer of early childhood. Conducted reference testing for rare metabolic disorders for an international audience.

1982-1983 NENS hypothyroid assay technologist with Tuft's University

1979-1981 Mass. Bay Community College, staff technologist preparing materials for the laboratory technician program, which included reagents, apparatus and maintaining stock cultures of human pathogens.

## Additional education and special training

Drug Analysis, completed six week training course by senior staff within the

Department of Public Health Drug Analysis Laboratory

National Laboratory Network Training Program course as Expert Witness

Qualified as an expert witness in the Massachusetts Courts and the U.S. District Court

CDC course in cell culture

CDC course in antibiotic resistance

CDC course in public health response to bioterrorism

U.S. Army course in biologic warfare and terrorism

#### **Journal Publications**

<u>Screening</u>, 1992, 1:34-37; Lawler, M., Frederick, S., Rodriguez-Anza, S., Wolf, B., Levy, H., Newborn Screening for Biotinidase Deficiency, Pilot Study and Follow-up of Identified Cases

<u>Genetic Screening</u>, 1990, 11-18, Mitchell, M., Lawler, M., Walraven, C., Hermos, R., To Screen or Not to Screen for Congenital Hyperplasia: Is that the Question?

<u>The Journal of Pediatrics</u>, 116: 78-83, Secor-McVoy,J., Lawler,M., Schmidt, M., Ebers,D., Hart,P., Pettit,D., Blitzer,M.,Wolf,B., Partial Biotinidase Deficiency: Clinical and Biochemical Features

#### **Professional Affiliations**

Northeastern Association of Forensic Scientists (NEAFS) since 2005

#### Awards

Theobald Smith Education Grant for graduate studies

#### Curriculum Vitae

## Annie Khan (Dookhan)

## Education:

University of Massachusetts, Boston, Ma., Master of Science in Chemistry, (present) University of Massachusetts, Boston, Ma., Bachelor of Science in Biochemistry, 2001

#### Experience:

2003 - present

Chemist II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, January 2004.
- \*Responsible for the identification of drugs to determine violations of harmful and narcotic drug laws.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Maintenance and repairs of analytical instruments.
- \*Maintain the Quality Control of analytical instruments and controls/standards.
- \* Maintain the Quality Control/Quality Assurance program for the drug lab.
- \*Notary Public

2001 - 2003

OC Analyst II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

\*Completed proficiency training conducted by a member of the staff within the

Massachusetts Biologic Laboratory, Quality Control and Quality Assurance Department.

- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Method Development for creating new techniques for the QC Department.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

## Additional Training:

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC course with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with Massachusetts Biologic Laboratory and Sievers.

#### Association:

American Chemical Society (ACS)

## PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

# The Commonwealth of Massachusetts Executive Office of Health and Human Services

Department of Public Health State Laboratory Institute

Boston Drug Laboratory Tel (617) 983-6622 Fax (617) 983-6625

Amherst Drug Laboratory Tel (413) 545-2601 Fax (413) 545-2608

**Boston Hours** 

8:00 - 11:00

2:00-4:00

# DRUG RECEIPT

**Amherst Hours** 

9:00 - 12:001:00 - 3:00

City or Department: Wey mouth Police Name and Rank of Submitting Officer: Pet Thomas P Defendant(s) Name (last, first, initial):  To be completed by Submitter Description of Items Submitted  Abouter	Anderson  To be completed to Gross Weight	
To be completed by Submitter Description of Items Submitted		
escription of Items Submitted		
escription of Items Submitted		
escription of Items Submitted		
plb w/ powder		MINN A I MILLINGE
	5,28 pr	1
	Date:/\(\triangle \).	

No.
City: Weymouth Police Dept.
Officer: Detective THOMAS ANDERSON
Def:
Amount: Subst: SUB
No. Cont: 2 Cont: pb

Date Rec'd: 10/08/2009 No. Analyzed: /
Gross Wt.: 5.28

Findings:

Henoin

Ge(3) 800

## DRUG POWDER ANALYSIS FORM

SAMPLE # _ GENCY U	ey noch ANALYST MM
No. of samples tested: Turner 4	Argino Evidence Wt. 5.28
PHYSICAL DESCRIPTION:	Gross Wt ( ): 0,6/5.5
2 pb u/substance	Gross Wt ( ):
	Pkg. Wt:
	Net Wt: 0. 1677
	OHAU8 2334 5-5-10
	20,= 20,000/9
	10/2 10,000/8
	20 = 20.00019 $10 = 10.00019$ $5 = 5.00019$ $1 = 1.00009$
	1 - 1,00005
PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt ( )	Gold Chloride
Thiocyanate ( )	
Marquis	TLTA ( )
Froehde's	OTHER TESTS
Mecke's	
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS	RESULTS NEWTH _
DATE	MS ASD
•	
	DATE 5-1971

File Name :  $F:\Q2-2010\SYSTEM4\05_13_10\716704.D$ 

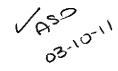
Operator : ASD

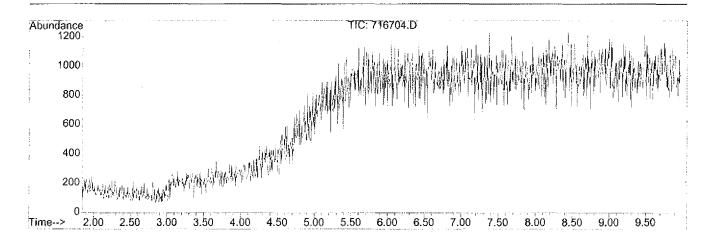
Date Acquired : 13 May 2010 7:42

Sample Name : BLANK

Submitted by :

Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE





Ret. Time

Area

Area

Ratio %

Information from Data File:

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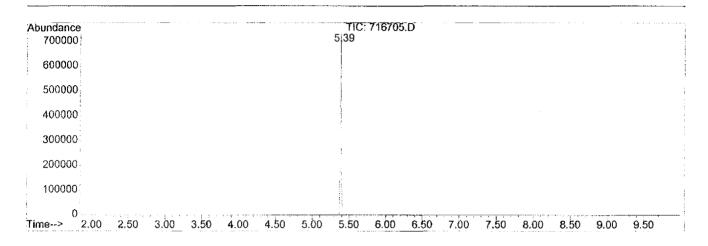
Operator : ASD

Date Acquired : 13 May 2010 7:55

Sample Name : HEROIN STD

Submitted by :

Vial Number : 5 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
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File Name : F:\Q2-2010\SYSTEM4\05 13 10\716705.D

Operator : ASD

Date Acquired : 13 May 2010 7:55

Sample Name : HEROIN STD

Submitted by

Vial Number AcquisitionMeth: DRUGS Integrator : RTE

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Minimum Quality: 90 Minimum Quality: 90

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C:\DATABASE\NIST98.L

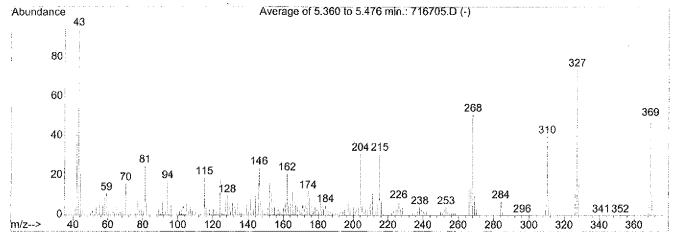
PK# RTLibrary/ID CAS# Oual

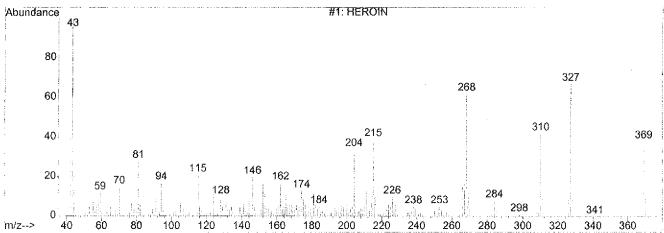
1 5.39 C:\DATABASE\SLI.L

HEROIN

000561-27-3

99





716705.D

Thu Mar 10 11:57:18 2011

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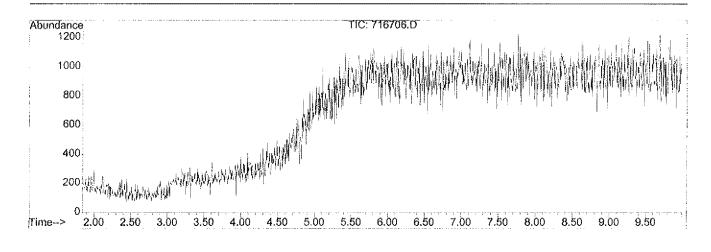
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Operator : ASD

Date Acquired : 13 May 2010 8:09

Sample Name : BLANK Submitted by : DCS Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

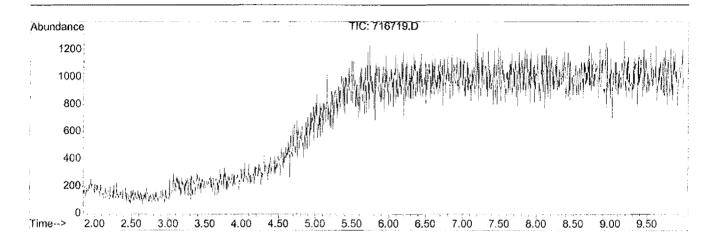
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Operator : ASD

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Sample Name : BLANK Submitted by : MGL Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

Information from Data File:

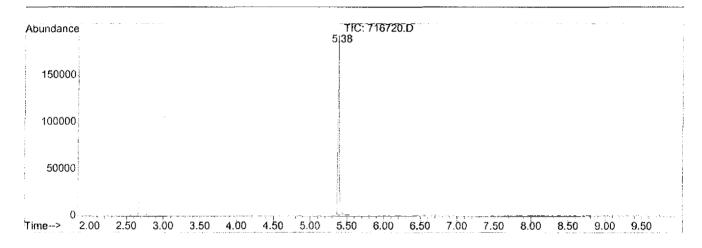
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Operator : ASD

Date Acquired : 13 May 2010 11:20

Sample Name :

Submitted by : MGL
Vial Number : 20
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
5.381	239117	100.00	100.00

File Name : F:\Q2-2010\SYSTEM4\05 13 10\716720.D

Operator : ASD

Date Acquired 13 May 2010 11:20

Sample Name

Submitted by MGL Vial Number 20 AcquisitionMeth: DRUGS Integrator : RTE

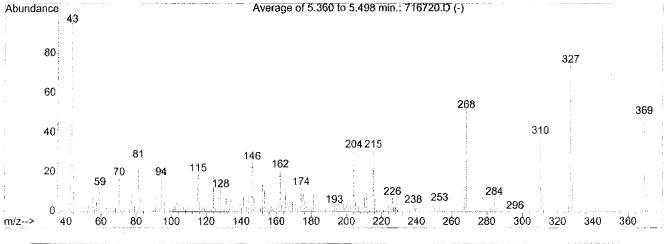
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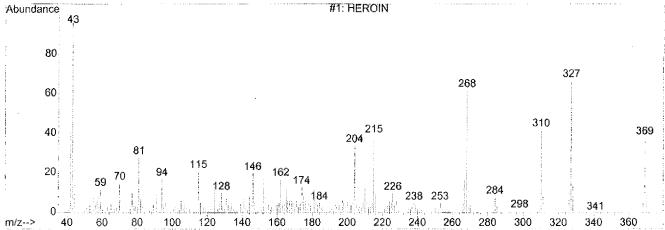
Minimum Quality: 90

C:\DATABASE\PMW TOX2.L

Minimum Quality: 90 C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
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716720.D

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Page 2

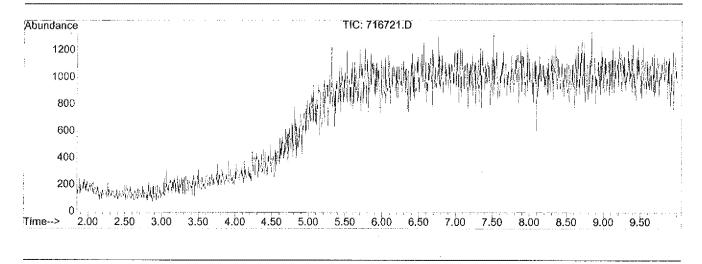
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Operator : ASD

Date Acquired : 13 May 2010 11:34

Sample Name : BLANK Submitted by : MGL Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

Information from Data File:

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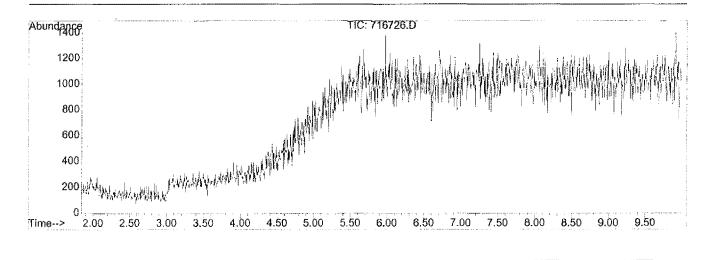
Operator : ASD

Date Acquired : 13 May 2010 12:42

Sample Name : BLANK

Submitted by :

Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

Information from Data File:

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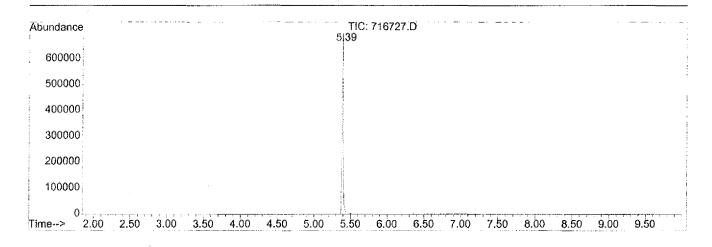
Operator : ASD

Date Acquired : 13 May 2010 12:55

Sample Name : HEROIN STD

Submitted by

Vial Number : 27 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
5.390	816523	100.00	100.00

File Name :  $F:\Q2-2010\SYSTEM4\05 13 10\716727.D$ 

Operator : ASD

Date Acquired : 13 May 2010 12:55

Sample Name : HEROIN STD

Submitted by :

Vial Number : 27 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

HEROIN

Minimum Quality: 90

000561-27-3

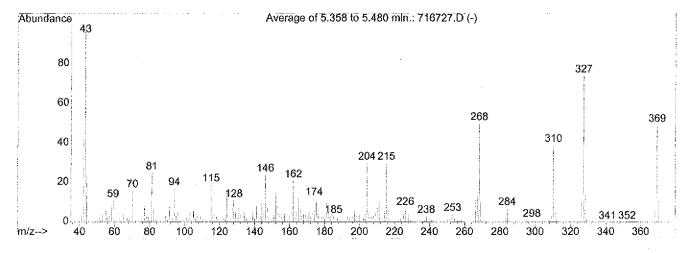
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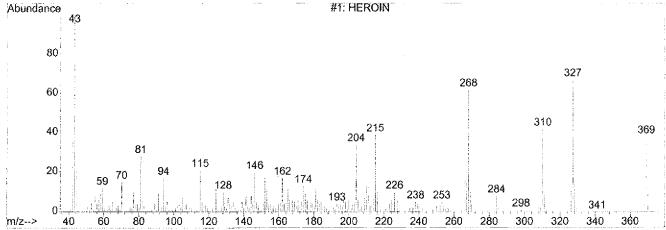
Minimum Quality: 90

99

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
				<del>-</del>
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716727.D

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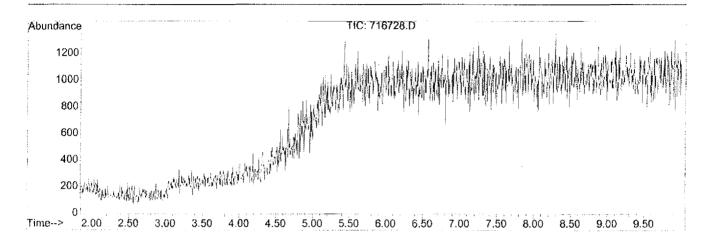
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Operator : ASD

Date Acquired : 13 May 2010 13:09

Sample Name : BLANK Submitted by : MGL Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

Last page..... ... no further data